(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 17 February 2005 (17.02.2005)

PCT

(10) International Publication Number WO 2005/014229 A1

(51) International Patent Classification7:

B25B 11/00

(21) International Application Number:

PCT/GB2004/001728

(22) International Filing Date: 23 April 2004 (23.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0316280.7 11 July 2003 (11.07.2003) 0406758.3

GB 26 March 2004 (26.03.2004) GB

(71) Applicant and

(72) Inventor: LENZINI, Martin, John [GB/GB]; Nevada, Thetford Road, Coney Weston, Bury St Edmunds IP31 1DN (GB).

(74) Agents: GEMMELL, Peter, Alan et al.; Dummett Copp, 25 The Square, Martlesham Heath, Ipswich IP5 3SL (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

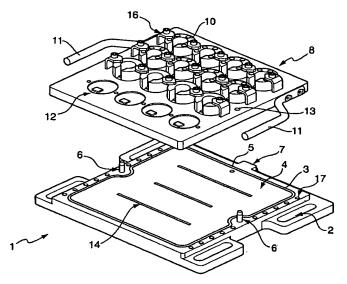
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK. TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: VACUUM HOLD-DOWN



(57) Abstract: A vacuum hold-down device comprising a base member (1) and a separate workpiece support (8) which co-operate to define a vacuum chamber. The device further comprises a venturi (15) having an inlet port (7) for connection to a source of pressurized fluid, an outlet (9) for fluid from the venturi, and a fluid connection (19, 5) from a low pressure region of the venturi (15) to the inside of the vacuum chamber, for providing a partial vacuum therein. The partial vacuum will hold the base member (1) and the workpiece support (8) together to maintain a peripheral seal therebetween. The workpiece support (8) is provided with securing means (16) for securing a workpiece (10) thereon. The invention also provides a vacuum hold-down system comprising the base member (1) and a plurality of interchangeable workpiece supports (8).

